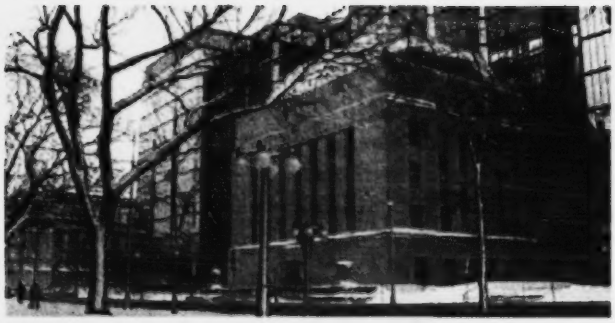
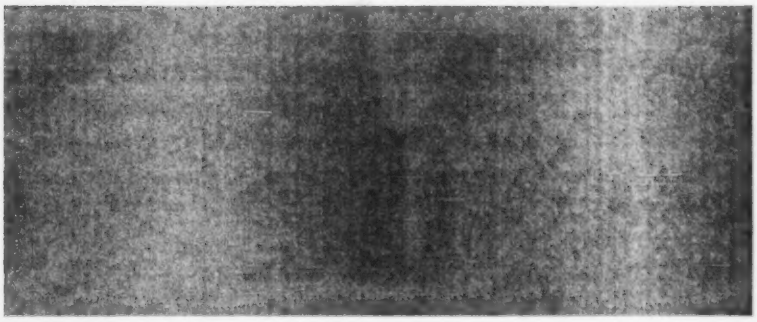
BANK OF CANADA
BANQUE DU CANADA

CELEBRATING 75 YEARS
CÉLÉBRONS 75 ANS

Monetary Policy Report

January 2010





www.bankofcanada.ca

CANADA'S INFLATION-CONTROL STRATEGY*

Inflation control and the economy

- Inflation control is not an end in itself; it is the means whereby monetary policy contributes to solid economic performance.
- Low, stable, and predictable inflation allows the economy to function more effectively. This contributes to better economic growth over time and works to moderate cyclical fluctuations in output and employment.

The monetary policy instrument

- Announcements regarding the Bank's policy instrument—the target overnight interest rate—take place, under normal circumstances, on eight pre-specified dates during the year.
- In setting a target for the overnight rate, the Bank of Canada influences short-term interest rates to achieve a rate of monetary expansion consistent with the inflation-control target. The transmission mechanism is complex and involves long and variable lags—the impact on inflation from changes in policy rates is usually spread over six to eight quarters.

The targets

- In February 1991, the federal government and the Bank of Canada jointly agreed on a series of targets for reducing total CPI inflation to the midpoint of a range of 1 to 3 per cent by the end of 1995. The inflation target has been extended a number of times. In November 2006, the agreement was renewed for a period of five years to the end of 2011. Under this agreement, the Bank will continue to conduct monetary policy aimed at keeping total CPI inflation at 2 per cent, with a control range of 1 to 3 per cent around the target.

Monitoring inflation

- In the short run, a good deal of movement in the CPI is caused by transitory fluctuations in the prices of such volatile components as fruit and gasoline, as well as by changes in indirect taxes. For this reason, the Bank uses a core measure of CPI inflation as an indicator of the underlying trend in inflation. This core measure excludes eight of the most volatile components of the CPI and adjusts the remaining components to remove the effect of changes in indirect taxes.

---

* See "Joint Statement of the Government of Canada and the Bank of Canada on the Renewal of the Inflation-Control Target" and background information. Reprinted in the *Bank of Canada Review* (Winter 2006–2007): 45–59.

Bank of Canada
234 Wellington Street
Ottawa, Ontario K1A 0G9

ISSN 1201-8783 (Print)
ISSN 1490-1234 (Online)
Printed in Canada on recycled paper

BANK OF CANADA
BANQUE DU CANADA

CELEBRATING 75 YEARS
CÉLÉBRONS 75 ANS

Monetary Policy Report

January 2010

THIS IS A REPORT OF THE GOVERNING COUNCIL OF THE BANK OF CANADA:
MARK CARNEY, PAUL JENKINS, PIERRE DUGUAY, DAVID LONGWORTH,
JOHN MURRAY, AND TIMOTHY LANE.

Today, the outlook has improved . . . . While the Canadian economy will likely grow faster than the other G-7 countries [in 2010], the Bank expects our recovery to be more protracted and more reliant on domestic demand than usual.

Mark Carney

Governor, Bank of Canada
16 December 2009
Toronto, Ontario

Contents

1 **Overview**

3 **The Global Economy**

3 Recent Developments

5 Developments in Global Financial Markets

6 Outlook for the Global Economy

11 **The Canadian Economy**

11 Recent Developments

11 Aggregate Demand and Supply

14 Estimated Pressures on Capacity

15 Inflation and the 2 Per Cent Target

16 Canadian Financial Conditions

19 Exchange Rate

20 Policy Response

20 Outlook for the Canadian Economy

20 Aggregate Demand and Supply

21 The Projection for Inflation

25 **Risks to the Outlook**

Technical Boxes

8 Reducing Global Imbalances

12 How Severe Was Canada's Downturn? A Global Comparison

Overview

The global economic recovery is under way, supported by continued improvements in financial conditions and stronger domestic demand growth in many emerging-market economies. While the outlook for global growth through 2010 and 2011 is somewhat stronger than the Bank had projected in its October *Monetary Policy Report*, the recovery continues to depend on exceptional monetary and fiscal stimulus, as well as extraordinary measures taken to support financial systems.

Economic growth in Canada resumed in the third quarter of 2009 and is expected to have picked up further in the fourth quarter. Total CPI inflation turned positive in the fourth quarter and the core rate of inflation has been slightly higher than expected in recent months. Nevertheless, considerable excess supply remains, and the Bank judges that the economy was operating about 3 1/4 per cent below its production capacity in the fourth quarter of 2009.

Canada's economic recovery is expected to evolve largely as anticipated in the October *Report*, with the economy returning to full capacity and inflation to the 2 per cent target in the third quarter of 2011. The Bank projects that the economy will grow by 2.9 per cent in 2010 and 3.5 per cent in 2011, after contracting by 2.5 per cent in 2009.

The factors shaping the recovery are largely unchanged—policy support, increased confidence, improving financial conditions, global growth, and higher terms of trade. At the same time, the persistent strength of the Canadian dollar and the low absolute level of U.S. demand continue to act as significant drags on economic activity in Canada. On balance, these factors have shifted the composition of aggregate demand towards growth in domestic demand and away from net exports. The private sector should become the sole driver of domestic demand growth in 2011.

The main risks to the outlook for inflation are those identified in the October *Monetary Policy Report*. Risks remain elevated, although they have continued to diminish gradually with the consolidation of the recovery in the global and Canadian economies.

The main upside risks to inflation are associated with the possibility of a stronger-than-anticipated global recovery. It is possible that the recovery in global demand could be more vigorous than projected, resulting in stronger external demand for Canadian exports. A related risk is that Canadian domestic demand could be more robust than projected.

This report includes information received up to the fixed announcement date on 19 January 2010.

On the downside, there is the risk that persistent strength of the Canadian dollar could act as a significant further drag on growth and put additional downward pressure on inflation. Another important downside risk is that the global recovery could be even more protracted than projected.

While the Bank judges that these underlying macroeconomic risks are roughly balanced, the overall risks to the inflation projection are tilted slightly to the downside as a result of monetary policy operating at the effective lower bound.

Over the medium term, global macroeconomic imbalances continue to pose significant risks to the outlook.

On 8 December 2009 and 19 January 2010, the Bank reaffirmed its conditional commitment to maintain its target for the overnight rate at its current level of 1/4 per cent until the end of the second quarter of 2010 in order to achieve the inflation target. In its conduct of monetary policy at low interest rates, the Bank retains considerable flexibility, consistent with the framework outlined in the April 2009 *Monetary Policy Report*.

The Global Economy

Recent Developments

Global economic and financial developments have been slightly more favourable than projected in October.

The global economic recovery is under way, supported by continued improvements in financial conditions and stronger domestic demand growth in many emerging-market economies. Global economic and financial developments have been slightly more favourable than projected in the October *Monetary Policy Report*, and the outlook for global economic growth through 2010 and 2011 is somewhat stronger. Nonetheless, the recovery is still expected to be more subdued than usual. Growth is heavily dependent on the exceptional monetary and fiscal policy stimulus provided worldwide, as well as the extraordinary measures taken to support financial systems in many advanced countries.

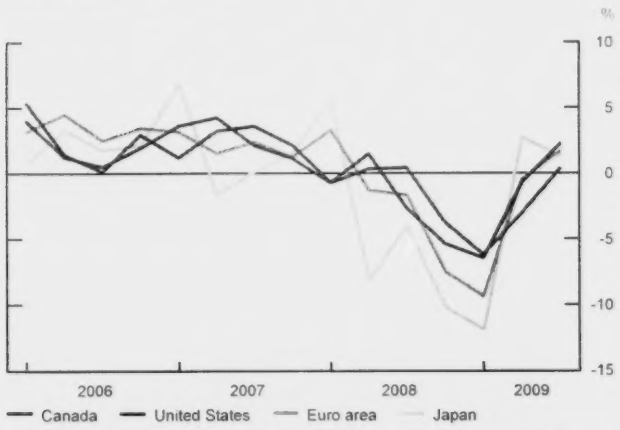
The recovery has now extended to most of the advanced economies.

The turnaround in global economic activity, which began in the second quarter of 2009, continues to strengthen, in line with the growth projections in the October *Report*. Economic activity in emerging-market countries—most notably China—is growing at a rapid pace, and the recovery has now extended to most of the advanced economies, with positive output growth recorded in both North America and the Euro area in the third quarter **(Chart 1)**. While unemployment rates remain high in most major advanced countries, there are signs that the pace of deterioration in labour market conditions has started to ease. Purchasing manager indexes have been rising in all major regions and are now at levels that are consistent with economic expansion. Large output gaps and the absence of wage pressure have kept underlying inflation in the major economies subdued. Headline inflation rates have nonetheless rebounded, since sharp declines in energy prices from 2008 are no longer holding down measured inflation **(Chart 2)**.

Monetary authorities in advanced economies continue to provide strong support for the recovery, and this has resulted in progressive improvements in financial conditions. In addition, government initiatives to arrest the economic decline and prime the recovery appear to have been better targeted and more effective than anticipated. A number of sectors, most notably automotive and housing, have benefited from these programs.

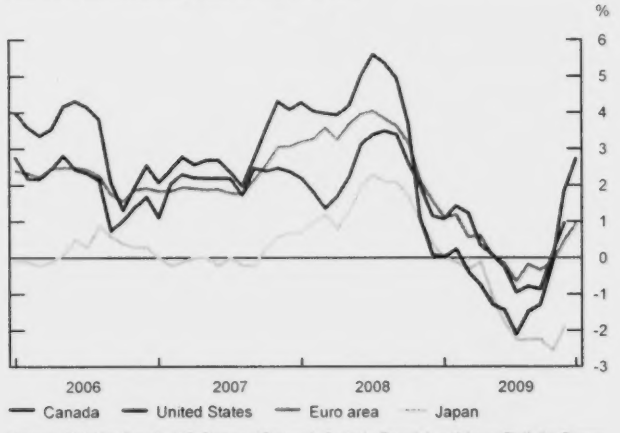
The U.S. economy began to recover in the third quarter of 2009, registering growth of 2.2 per cent. Larger-than-expected improvements in financial wealth have supported consumption, and stronger growth in the rest of the world, primarily in emerging Asia, helped to boost exports. The Bank estimates that U.S. growth in the fourth quarter rose to 4.6 per cent, driven principally by an important contribution from inventories, continued robust growth in exports, and steady increases in residential construction. Motor-vehicle production is also estimated to have risen more quickly than previously anticipated.

Chart 1: The major advanced economies are now growing
Quarterly growth at annual rates



Sources: Statistics Canada, U.S. Bureau of Economic Analysis, Eurostat, and Japan Statistics Bureau

Chart 2: Headline inflation is rising in most advanced economies
Year-over-year percentage change, monthly data



Sources: Statistics Canada, U.S. Bureau of Economic Analysis, Eurostat, and Japan Statistics Bureau

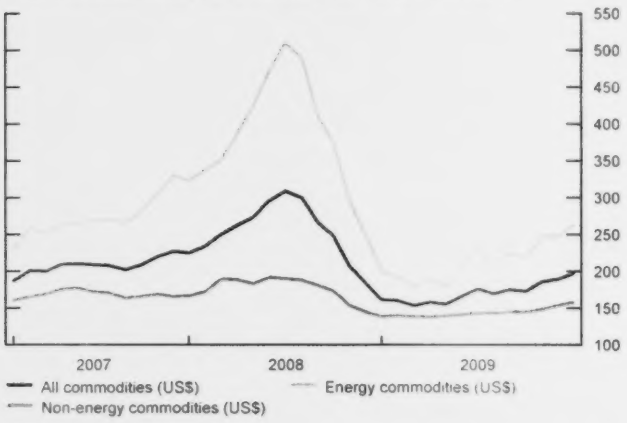
While GDP growth in the Euro area, at 1.7 per cent, came in slightly weaker than expected in the third quarter, indicators suggest that the recovery is becoming more firmly entrenched. The three largest economies—Germany, France, and Italy—all reported an upturn in industrial production for the first time since the first quarter of 2008. While the recovery is still tentative in Japan, business confidence and corporate profits, supported by strong export demand, have improved recently.

Economic activity in emerging-market countries—most notably China—is growing at a rapid pace.

China's third-quarter GDP release reported year-over-year growth of 8.9 per cent, underpinned by strong sales of durable goods, increased investment in housing, and rising exports, as the effects of the large fiscal stimulus and accommodative monetary and credit policies continue to be felt. Emerging concerns about possible overheating in China have prompted authorities to tighten credit conditions slightly to mitigate inflationary pressures.

The Bank's index of commodity prices rose moderately from its level at the time of the October *Report*, as natural gas prices firmed and non-energy commodity prices rose in response to greater-than-expected demand from emerging Asia **(Chart 3)**.

Chart 3: Commodity prices have risen since the October *Report*
Bank of Canada commodity price index (1982–90 = 100), monthly data



Source: Bank of Canada

Developments in Global Financial Markets

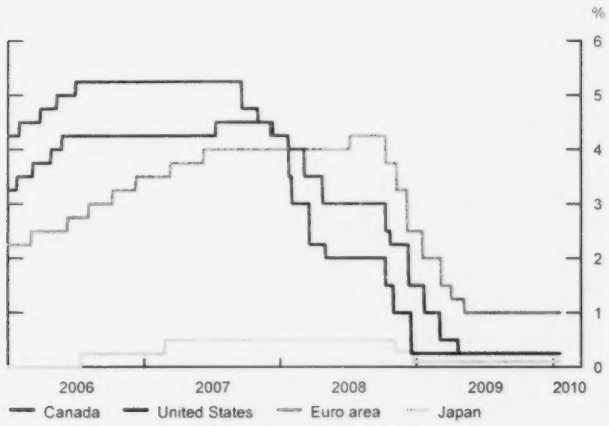
Financial conditions in advanced economies have improved and are contributing to the emerging global recovery.

Financial conditions in advanced economies have improved and are contributing to the emerging global recovery. Equity markets have recovered substantially over the past three quarters, and firms have enjoyed greater access to capital markets, with global corporate bond issuance reaching record levels. Borrowing costs also remain low as credit spreads continue to decline. Bank profits and capitalization have generally strengthened worldwide. Underpinning all of these improvements are the historically low official interest rates maintained by all major countries **(Chart 4)**.

Mortgage rates remain close to record lows in the United States, aided by targeted central bank purchases. Improvements in the non-conforming mortgage market have been more modest, however, and securitized markets remain impaired, with public sector measures continuing to provide important support. Despite the narrowing in spreads and generally low interest rates observed in many countries, lending to households and businesses, especially small and medium-sized enterprises, remains restricted, reflecting the effect of past and prospective loan losses on banks' capital, as well as uncertainty about the impact of regulatory reforms on required bank capital and liquidity.

Yields on long-term government bonds have risen since the last *Report*, reflecting a more positive economic outlook. Indeed, some countries have started to raise interest rates and withdraw unconventional measures in anticipation of stronger growth and emerging price pressures. Recent events have also focused market attention on the potential sovereign credit risk associated with mounting debt levels in a number of countries.

Chart 4: Policy rates have remained at historic lows in most countries
Daily data



Sources: Bank of Canada, U.S. Federal Reserve, European Central Bank, and Bank of Japan

Outlook for the Global Economy

Recent indicators point to a more favourable outlook for global economic growth in 2010 than previously anticipated.

Recent indicators point to a more favourable outlook for global economic growth in 2010 than previously anticipated **(Table 1)**. The Bank now expects the world economy to grow at a rate of 3.7 per cent in 2010 and 4.1 per cent in 2011. While sustained, the projected recovery is relatively gradual, considering the depth of the recession. The revisions to the outlook for 2010 reflect further improvements in global financial conditions, stronger growth in emerging Asia, and additional fiscal programs to support domestic demand in advanced economies. The growth of private sector demand in advanced countries is nevertheless expected to remain relatively weak, as households repair their balance sheets, businesses restructure, temporary fiscal incentives come to an end, and financial intermediaries continue to pursue conservative lending strategies in an effort to rebuild capital.

U.S. economic growth in 2010 and 2011 is projected to be slightly higher than expected in October.

In the United States, growth in 2010 and 2011 is projected to be slightly higher than previously expected, owing to stronger-than-expected growth in consumption and exports, as well as additional fiscal measures. Nonetheless, the recovery of domestic demand in 2010 is still expected to be relatively

Table 1: Projection for global economic growth

	Share of real global GDP[a] (per cent)	Projected growth (per cent)[b]			
		2008	2009	2010	2011
United States	21	0.4 *(0.4)*	-2.5 *(-2.5)*	2.5 *(1.8)*	3.9 *(3.8)*
Euro area	16	0.5 *(0.5)*	-3.9 *(-3.9)*	1.2 *(0.9)*	2.1 *(2.4)*
Japan	7	-1.2 *(-0.7)*	-5.3 *(-5.7)*	1.9 *(1.7)*	2.0 *(2.5)*
China	11	9.1 *(9.1)*	8.3 *(8.1)*	9.3 *(8.9)*	9.2 *(8.9)*
Rest of the world	45	4.0 *(3.9)*	-2.0 *(-2.1)*	4.0 *(3.3)*	4.0 *(3.7)*
World	**100**	**2.9 *(2.9)***	**-1.5 *(-1.6)***	**3.7 *(3.1)***	**4.1 *(4.0)***

a. GDP shares are based on IMF estimates of the purchasing-power-parity (PPP) valuation of country GDPs for 2007.
Source: IMF, *WEO*, April 2009
b. Numbers in parentheses are projections used for the October 2009 *Monetary Policy Report*.
Source: Bank of Canada

weak, with much of the anticipated growth attributable to past and ongoing fiscal and monetary stimulus. Growth in consumer spending will be weaker than in past recoveries, since households still need to rebuild their wealth and may face limited access to credit. The household savings rate is expected to rise to over 6 per cent in the next two years (from a low of 1.2 per cent in the first quarter of 2008). The growth of business investment in commercial real estate will likely remain weak, owing to rising vacancies and falling property prices. Exports are expected to grow substantially, supported by a weaker U.S. dollar and a faster-than-anticipated recovery in overseas economies. Higher productivity growth and lower unit labour costs have also made U.S. goods more competitive. Net exports are not expected to make a positive contribution to GDP growth until the second half of 2010, however, because imports will also rebound sharply as domestic demand recovers.

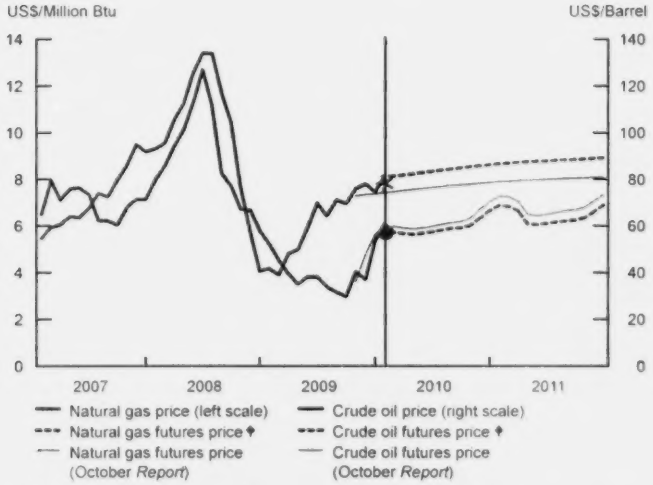
Economic growth in the Euro area is projected to be somewhat stronger in 2010 than previously expected, supported by increased export growth and a modest improvement in the outlook for labour markets. Consumer confidence has also improved, and proposed tax cuts in Germany could provide some additional support in the near term. However, concerns about future fiscal tightening in the Euro area and possible limitations on the availability of bank credit could dampen growth in subsequent periods. Growth in Japan is being sustained by expansionary monetary and fiscal policies and by strong Asian demand for Japanese products, but is expected to remain modest through 2010–11, given high unemployment and weak wage growth. In addition, business investment is likely to be constrained by high excess capacity.

The Chinese economy is expected to grow by more than 9 per cent in each of the next two years, with an expanding share of private investment and consumption, and less reliance on government subsidies, public investment, and exports. As a result, domestic demand should play a greater role in

The Chinese economy is expected to grow by more than 9 per cent in each of the next two years.

Chart 5: Futures curves suggest rising prices for crude oil and natural gas

Monthly data



* Spot price for crude oil (15 January 2010)

• Spot price for natural gas (15 January 2010)

♦ Based on an average of futures contracts over the two weeks ending 15 January 2010

Note: Values for crude oil and natural gas prices in January 2010 are estimates based on the average daily spot prices up to 15 January 2010.

Source: NYMEX

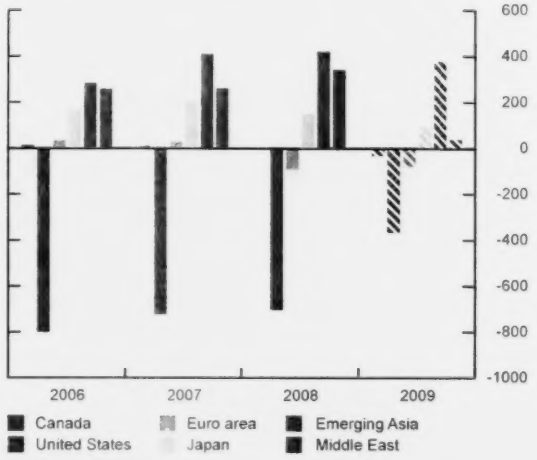
Technical Box 1

Reducing Global Imbalances

Current account imbalances among major regions declined during the recent recession **(Charts 1-A** and **1-B)**. This development reflects a combination of temporary and more persistent factors. Cyclical factors include a sharper decline in U.S. domestic demand than that experienced by its major trading partners and the abrupt decline of oil prices. The U.S. current account deficit is likely to widen in the near term as the U.S. economy recovers and as energy prices increase. Over the medium term, it is expected that the U.S. current account will gradually move to a sustainable long-run position (around 2.5 per cent of GDP).[1] A major decline in the surpluses of emerging Asia and, to a lesser extent, in those of Europe and Japan, is the counterbalance to this improvement, while oil-exporting countries are expected to experience larger surpluses.

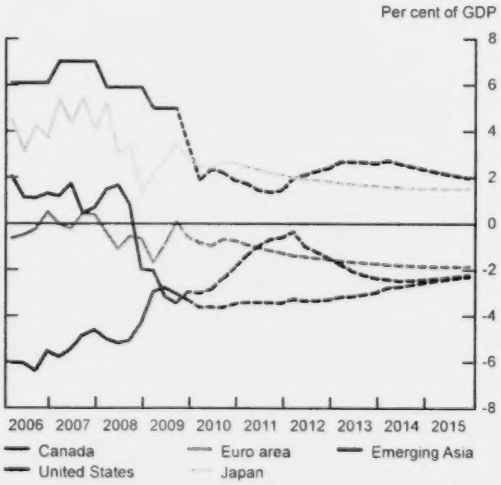
Improvement over the medium term is conditional on changes in behaviour and policy adjustments on several fronts. These include: a sustained fiscal consolidation in the United States and several other advanced countries; an upward adjustment of U.S. household savings consistent with the Bank's base-case projection; increased policy-induced domestic demand in China and other major emerging-market economies; and a real exchange rate appreciation in surplus countries. Should these conditions fail to materialize, a return to the large imbalances of the past cannot be discounted.

Chart 1-A: Current account balance
Annual data, billions of U.S. dollars



Note: Figures for 2009 are estimates.
Source: International Monetary Fund, *World Economic Outlook*, October 2009

Chart 1-B: Current account balance projections
Quarterly data



Note: Historical data up to 2009Q3; dashed lines indicate projections based on BoC-GEM-FIN.
Source: Bank of Canada estimates

1 The Bank of Canada's global economy model (BoC-GEM-FIN) was used to construct this scenario. Beaton, de Resende, Lalonde, and Snudden will provide more detail in a forthcoming Bank of Canada Discussion Paper.

China's growth than in the past, helping to reduce global imbalances. Many emerging-market economies will benefit from China's sustained growth and rising demand for commodities, further supporting the global recovery.

After declining by over 30 per cent in 2009, on a year-over-year basis, commodity prices are expected to increase over the next two years as the global recovery takes hold. Based on futures markets, oil prices are assumed to rise to around US$88 per barrel in 2011 **(Chart 5)**. The Bank projects non-energy commodity prices to increase by about 10 per cent in both 2010 and 2011.

Commodity prices are expected to increase as the global recovery takes hold.

The Bank expects that growth in the global economy will accelerate over the next two years, but that the pace of the recovery in advanced countries will be moderate. It will take time to repair household and bank balance sheets, and for financial conditions to return to normal. In the near term, growth in real output will depend to a significant degree on past and ongoing fiscal and monetary stimulus. Although global current account imbalances narrowed during the recession, some reversal can be expected as economies recover and commodity prices strengthen. Further corrective policy action will be required over the medium term to put global growth on a strong, yet sustainable and balanced, path **(Technical Box 1)**.

The Canadian Economy

The Canadian economic recovery is expected to evolve largely as anticipated in the October *Report*, with the economy returning to full capacity in the third quarter of 2011. While core inflation has remained slightly higher than projected in recent months, total inflation has rebounded as expected. The stickiness of core inflation since the beginning of the year is likely related to the resilience in wage growth. With wage growth expected to stay at the more moderate levels seen recently, and with excess supply being gradually absorbed, both core and total CPI inflation are expected to return to 2 per cent in the third quarter of 2011.

The Canadian economic recovery is expected to evolve largely as anticipated in the October Report.

Recent Developments

Aggregate Demand and Supply

Although real GDP in Canada contracted for three consecutive quarters, the magnitude of the downturn was more modest than in other major advanced economies. In particular, domestic demand held up much better in Canada than elsewhere, reflecting the soundness of Canada's banking system, relatively healthy household and corporate balance sheets, and the speed and scale of monetary policy actions. Nevertheless, the Canadian economy experienced a severe recession, owing largely to the downturn in sectors of the U.S. economy that are particularly important for Canadian exports, such as the automotive and housing sectors **(Technical Box 2)**.

Economic growth resumed in the third quarter of 2009, with real GDP increasing by a meagre 0.4 per cent (at annual rates), less than had been anticipated in the October projection. A sharp pickup in domestic demand and a rebound in exports were mainly offset by a surprisingly large surge in imports. Real gross domestic income increased significantly, however, reflecting an improvement in Canada's terms of trade **(Chart 6)**.

Economic growth resumed in the third quarter of 2009, with real GDP increasing by a meagre 0.4 per cent.

Third-quarter growth in final domestic demand was broad based and stronger than expected. The contribution of government expenditures to growth increased further, and household spending continued to recover. An unexpected surge in investment in machinery and equipment also contributed to the pickup in domestic demand. Overall, sales rebounded sharply, and firms continued to draw down inventories, resulting in a decline in the stock-to-sales ratio. Net exports exerted a substantial and larger-than-expected drag on growth. The 36 per cent increase (at annual rates) in imports was unusually large, even after accounting for the surge in investment and the appreciation of the Canadian dollar.

Technical Box 2

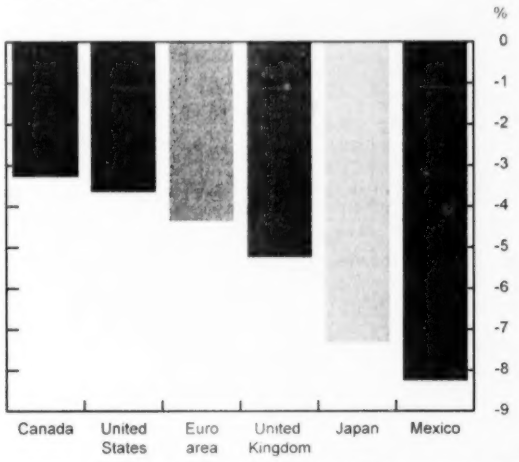
How Severe Was Canada's Downturn? A Global Comparison

The global economy is pulling out of the deepest and most synchronous economic downturn since the 1930s. Canada has suffered less than many other countries, partly because of its sound banking system and relatively strong household and corporate balance sheets, and also because of the speed and scale of monetary policy actions.

When Canada's experience is compared with that of other major economies, it is apparent that, with a cumulative drop of 3.3 per cent **(Chart 2-A)**, Canada's real GDP declined less than in most countries.

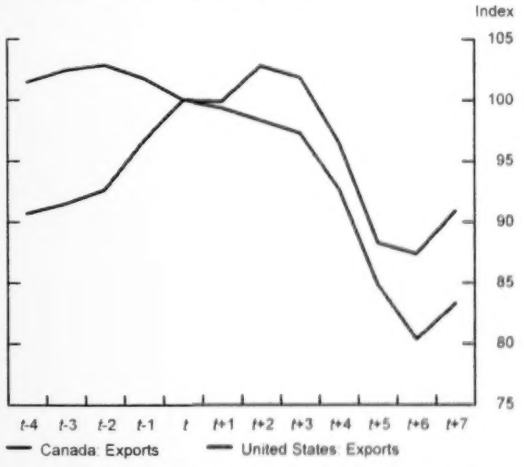
However, the decline in Canadian output was only slightly less than that in the United States, its major trading partner. Canadian exports suffered disproportionately from the weakness in the U.S. economy. The Bank's trade-weighted measure of U.S. activity fell by 22 per cent, driven mainly by the automotive and housing sectors, while U.S. GDP declined by only 3.7 per cent.[1] Canadian exports fell by nearly 20 per cent, compared with 12 per cent for the United States **(Chart 2-B)**. Canada's relatively solid economic performance, in spite of this trade shock, reflects the resilience of Canadian household demand. Consumer spending barely declined in Canada, while U.S. private consumption dropped by 1.9 per cent **(Chart 2-C)**. Similarly, the fall in total gross fixed-capital formation in the United States was roughly twice the decline in Canada.[2]

Chart 2-A: Percentage change in real GDP from 2007Q4 to trough[a]



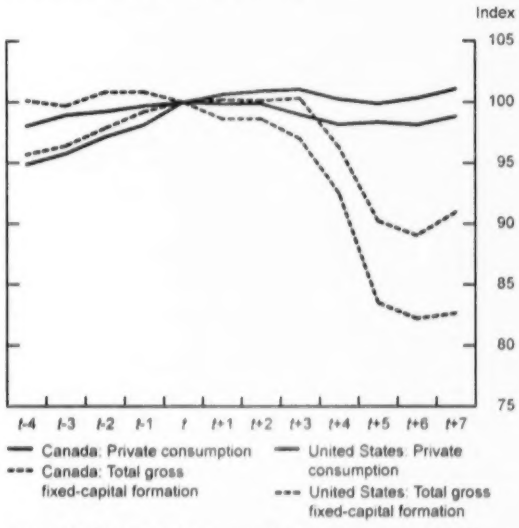
a. 2007Q4 corresponds to the start of the recession in the United States (based on NBER)
Sources: OECD and Bank of Canada calculations

Chart 2-B: Components of real GDP
Canada–U.S. comparison (2007Q4 = 100)



Note: t = 2007Q4, the start of the recession in the United States (based on NBER)
Sources: OECD and Bank of Canada calculations

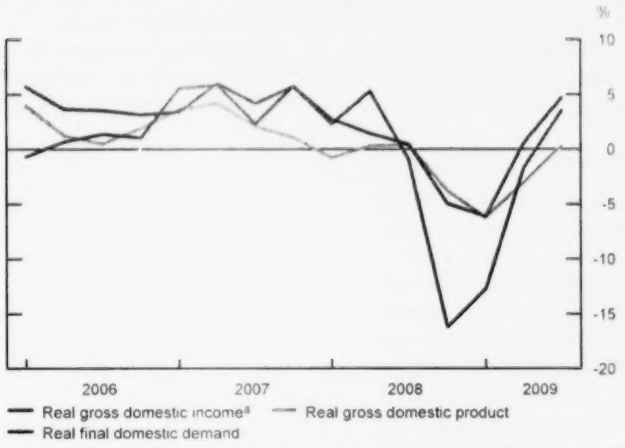
Chart 2-C: Components of real GDP
Canada–U.S. comparison (2007Q4 = 100)



Note: t = 2007Q4, the start of the recession in the United States (based on NBER)
Sources: OECD and Bank of Canada calculations

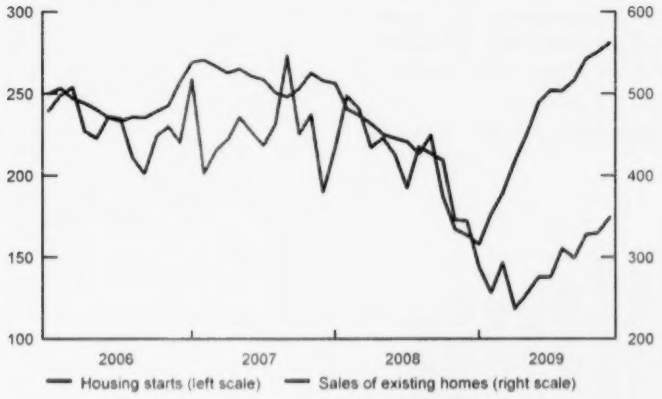
1 For more details on the U.S. activity index used by the Bank, see Technical Box 2 in the July 2009 *Report*.
2 Total gross fixed-capital formation includes residential, business (machinery and equipment, building, and engineering), and government investment.

Chart 6: Canadian final domestic demand and real gross domestic income increased sharply in the third quarter of 2009
Quarterly growth at annual rates



a. Real gross domestic income is current-dollar gross domestic product deflated by the price index for final domestic demand.
Source: Statistics Canada

Chart 7: Sales of existing homes have surged
Thousands of units, annualized monthly data



Sources: Canada Mortgage and Housing Corporation and Multiple Listing Service

The pace of economic growth in Canada is expected to have accelerated to 3.3 per cent in the final quarter of 2009, with final domestic demand and exports continuing to grow rapidly and import growth moderating.[1] Both household and government spending are projected to contribute to the ongoing strength in final domestic demand, while business investment is expected to have undergone a temporary correction. Recent indicators suggest that residential investment posted another large increase, driven by buoyant activity in the resale market **(Chart 7)**. Prices for resale housing have increased markedly with the rebound in consumer confidence and as

The pace of economic growth in Canada is expected to have accelerated to 3.3 per cent in the final quarter of 2009.

1 The Bank's projection for the fourth quarter does not take into account any possible impact from absenteeism due to the H1N1 influenza.

record-low mortgage rates have increased affordability. Housing starts also picked up towards a level consistent with demographic requirements.

The Bank expects potential output growth to trough at 1.2 per cent in 2009, and then to pick up to 1.5 per cent in 2010 and 1.9 per cent in 2011.

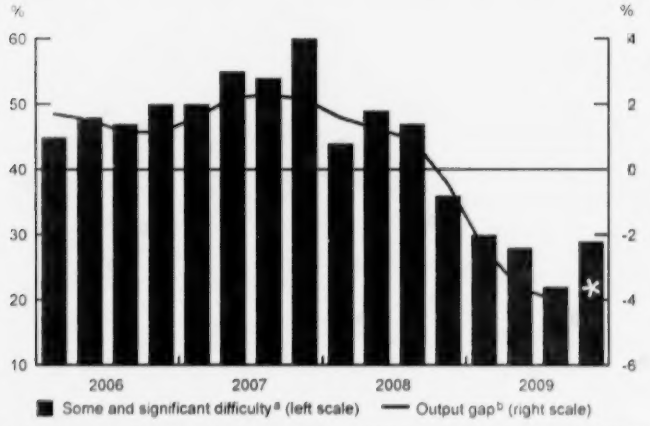
In the October *Report*, the Bank revisited its assumptions for both trend labour productivity and trend labour input, and concluded that the profile for the growth of potential output assumed in the April *Report* remained appropriate.[2] The Bank expects potential output growth to trough at 1.2 per cent in 2009, and then to pick up to 1.5 per cent in 2010 and 1.9 per cent in 2011.

Estimated Pressures on Capacity

Owing to weaker-than-expected GDP growth, the amount of excess supply in the Canadian economy in the third quarter was larger than assumed in the October *Report*. Excess supply is expected to have started to contract in the fourth quarter, in line with the expansion in economic activity. The Bank's conventional measure of the output gap suggests that the economy was operating 3.7 per cent below its production potential in the fourth quarter of 2009 **(Chart 8)**. When assessing excess capacity, the Bank considers its conventional measure in conjunction with several other indicators, since there is considerable uncertainty surrounding estimates of potential output, particularly when the economy is coming out of a deep recession. In the Bank's winter *Business Outlook Survey* (http://www.bankofcanada.ca/en/bos/2010/winter/bos0110e.pdf), the percentage of firms reporting that they would have difficulty meeting an unanticipated increase in demand increased slightly, albeit from a very low level.

Recent indicators suggest that Canada's labour market has stopped deteriorating, consistent with the resumption of GDP growth. Both employment levels and average hours worked appear to have bottomed out in the summer **(Chart 9)**, and the unemployment rate has been hovering around 8.5 per cent. Ongoing weakness in the labour market is nevertheless evident in the Bank's

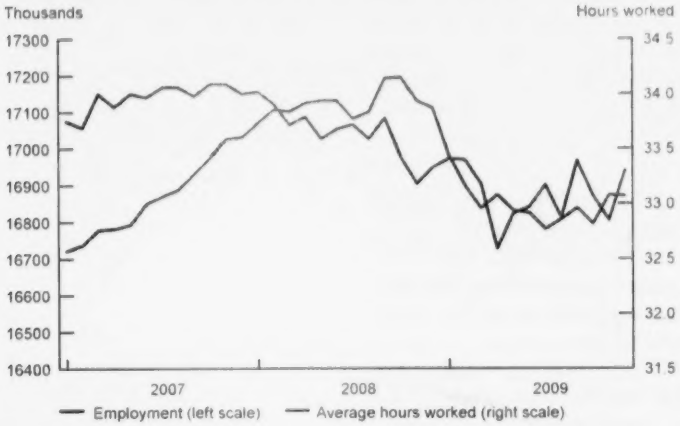
Chart 8: There is substantial excess supply in the Canadian economy



a. Response to *Business Outlook Survey* question on capacity pressures. Percentage of firms indicating that they would have either some or significant difficulty meeting an unanticipated increase in demand/sales.
b. Difference between actual output and estimated potential output. The estimate for the fourth quarter of 2009 (indicated by *) is based on a projected increase in output of 3.3 per cent (at annual rates) for the quarter.
Source: Bank of Canada

2 For more details on the Bank's assumptions regarding potential output, see Technical Box 3 in the October *Report*.

Chart 9: The labour market appears to have stopped deteriorating
Monthly data



Sources: Statistics Canada and Bank of Canada calculations

winter *Business Outlook Survey*, in which the percentage of firms reporting labour shortages declined further, reaching its lowest level since the series began in 1998.

After reviewing all the indicators of capacity pressures and taking into account the weakness in potential output associated with the ongoing restructuring in the Canadian economy, the Bank judges that the economy was operating about 3 1/4 per cent below its production capacity in the fourth quarter of 2009.

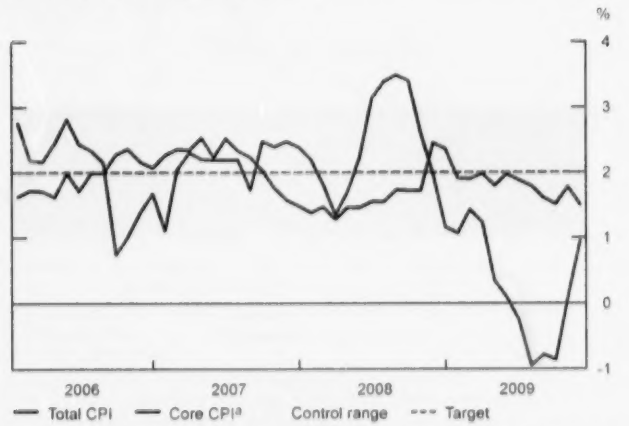
The Bank judges that the economy was operating about 3 1/4 per cent below its production capacity in the fourth quarter of 2009.

Inflation and the 2 Per Cent Target

Total CPI inflation turned positive in the fourth quarter of 2009, as had been anticipated in the October *Report*, as a result of year-over-year increases in energy prices. The 12-month rate of change in the total CPI bounced back to 1.0 per cent in November (from the -0.9 per cent trough reached during the summer) **(Chart 10)**, and is expected to have picked up further in December.

Total CPI inflation turned positive in the fourth quarter, as anticipated.

Chart 10: Total and core CPI inflation remain below 2 per cent
Year-over-year percentage change, monthly data



a. CPI excluding eight of the most volatile components and the effect of changes in indirect taxes on the remaining components
Source: Statistics Canada

The core rate of inflation has been slightly stronger than expected in recent months.

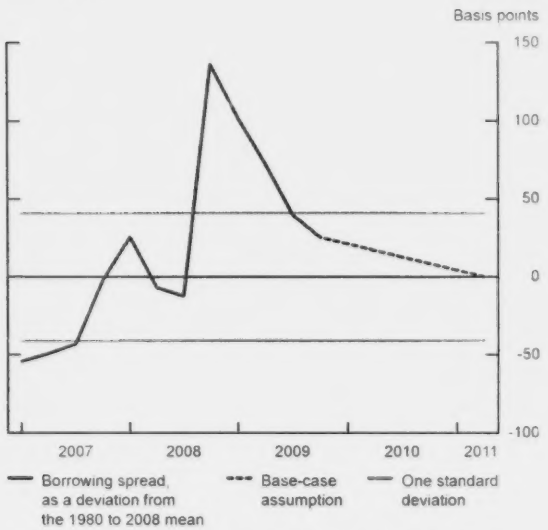
The core rate of inflation was 1.5 per cent in November and has been slightly stronger than expected in recent months, partly owing to larger-than-anticipated increases in property taxes and in some regulated prices. In spite of the large amount of excess supply in the economy, core inflation has remained quite close to 2 per cent since the beginning of the year. This stickiness of core inflation is likely related to the fact that wage growth had remained high relative to the underlying trend in productivity. With wage growth decelerating in recent months, the gap between the two has begun to narrow.

Reflecting the anticipated effects of year-over-year increases in energy prices on CPI inflation, measures of near-term inflation expectations have risen closer to the 2 per cent target in recent months. The latest Consensus Economics forecast for total CPI inflation is 1.7 per cent for 2010. Expectations for average inflation over the next two years, as reported in the Bank's most recent *Business Outlook Survey*, continue to show inflation expectations concentrated within the Bank's inflation-control range. Market-based measures of inflation expectations are within historical range after adjusting for liquidity effects. Taking this and other information into account, the Bank judges that medium- and longer-term inflation expectations remain well anchored to the 2 per cent inflation target.

Canadian Financial Conditions

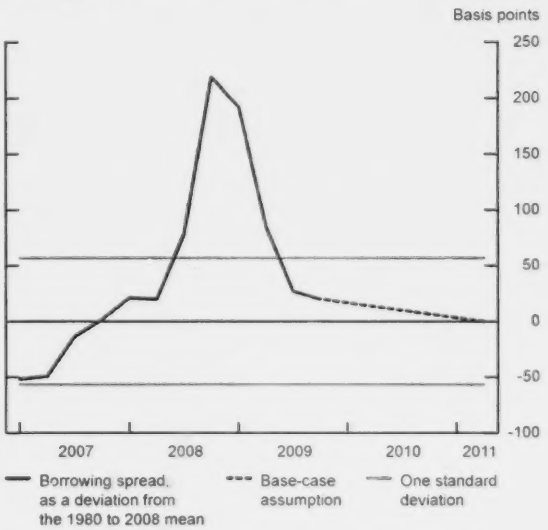
Following a period of marked improvement, overall financial and credit conditions in Canada have remained fairly stable since the October *Report*. Canada's overall financial conditions continue to be more favourable than in most other advanced economies, as has been the case since the onset of the global financial crisis. The vast improvement in the credit conditions

Chart 11a: Household borrowing spreads have declined . . .
Quarterly data



Note: The effective household borrowing spread is a weighted average of short- and long-term spreads, where spreads are constructed as the difference between the short- and long-term effective household borrowing rates and the relevant risk-free interest rate, respectively. For more information on the effective household interest rate, see <http://credit.bankofcanada.ca/financialconditions>.
Source: Bank of Canada calculations

Chart 11b: . . . as have business borrowing spreads
Quarterly data



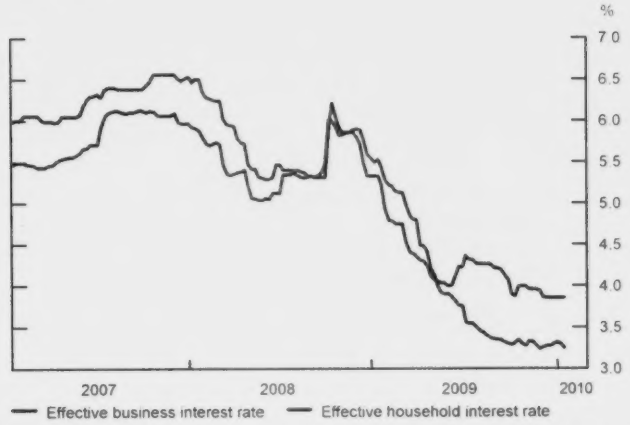
Note: The effective business borrowing spread is a weighted average of short- and long-term spreads, where spreads are constructed as the difference between the short- and long-term effective business borrowing rates and the relevant risk-free interest rate, respectively. For more information on the effective business interest rate, see <http://credit.bankofcanada.ca/financialconditions>.
Source: Bank of Canada calculations

faced by Canadian borrowers over the past year is evident in the sharp declines in the spreads paid by households and businesses to secure funds **(Charts 11a** and **11b)**. These spreads are assumed to be back to longer-term historical averages by early 2011.

Since the October *Report*, funding costs for Canadian banks have remained fairly flat at very low levels. Borrowing costs for households also remain at very low levels by historical standards **(Chart 12)**, and household credit has continued to grow at a brisk pace **(Chart 13)**, pushing the debt-to-income ratio of Canadian households to a historic peak.[3] Although both mortgage

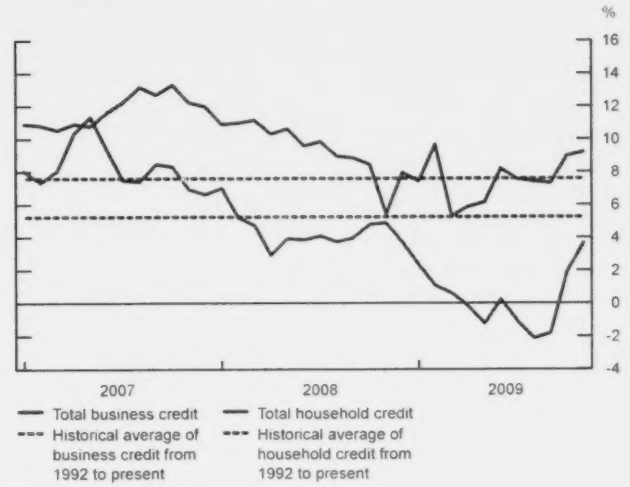
Following a period of marked improvement, overall financial and credit conditions in Canada have remained fairly stable since the October Report.

Chart 12: Household and business borrowing costs remain at very low levels
Weekly data



Note: For more information on these series, see <http://credit.bankofcanada.ca/financialconditions>.
Source: Bank of Canada calculations

Chart 13: Household credit continues to grow at a brisk pace, and business credit has started to grow again
3-month percentage change (at annual rates)



Source: Bank of Canada

3 As discussed in the December issue of the *Financial System Review*, the very high level of the household debt-to-income ratio increases the vulnerability of households to shocks.

Table 2: Borrowing costs for households and businesses

Percent

Date	Overnight rate	Prime rate	Estimated effective variable mortgage rate	Posted 5-year mortgage rate	3-month bankers' acceptances rate	Long-term corporate bond rate
31 July 2007	4.50	6.25	5.35	7.24	4.75	5.42
18 October 2007	4.50	6.25	5.65	7.43	4.85	5.41
6 December 2007	4.25	6.00	5.40	7.37	4.70	5.36
24 January 2008	4.00	5.75	5.25	7.39	4.06	5.30
24 April 2008	3.00	4.75	4.15	6.99	3.23	5.32
17 July 2008	3.00	4.75	4.20	7.09	3.29	5.48
23 October 2008	2.25	4.00	5.00	7.20	2.68	5.99
11 December 2008	1.50	3.50	4.50	6.73	1.77	6.04
22 January 2009	1.00	3.00	3.80	5.90	1.06	5.90
5 March 2009	0.50	2.50	3.30	5.74	0.69	5.86
23 April 2009	0.25	2.25	3.00	5.25	0.46	5.32
8 June 2009	0.25	2.25	2.85	5.52	0.43	4.83
23 July 2009	0.25	2.25	2.65	5.85	0.44	4.54
14 September 2009	0.25	2.25	2.45	5.50	0.43	4.08
22 October 2009	0.25	2.25	2.25	5.80	0.43	4.06
10 December 2009	0.25	2.25	2.15	5.49	0.44	3.89
15 January 2010	0.25	2.25	2.05	5.49	0.44	3.80

Sources: Long-term corporate bond rate, Bloomberg; all other series, Bank of Canada

and consumer credit posted solid growth rates in recent months, consumer credit grew more quickly, driven mainly by draws on personal lines of credit (including home equity lines of credit).

Survey results suggest that credit conditions for businesses eased slightly in the fourth quarter.

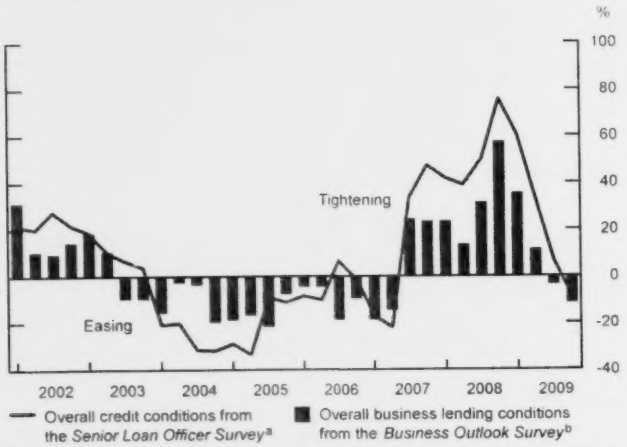
Borrowing costs for Canadian businesses have also remained very low **(Table 2)**. Taken together, results from the Bank's latest *Senior Loan Officer Survey* (http://www.bankofcanada.ca/en/slos/pdf/slos2009Q4.pdf) and the *Business Outlook Survey* suggest that, following a period of substantial tightening, credit conditions for businesses eased slightly in the fourth quarter, for the first time since the global financial crisis began **(Chart 14)**. However, the improvement in credit conditions mainly affected large firms, as conditions continued to tighten for some small and medium-sized firms.

Business credit has started to grow again, led by an increase in market-based sources of credit **(Chart 13)**. Following a period of contraction that began in the second quarter, overall business credit grew by 3.7 per cent (at annual rates) in the three months to November. Bank-based business credit has continued to contract sharply since the October *Report*, reflecting both an improvement in the ability of firms to access capital markets for funding and the further tightening of credit conditions for some small business borrowers.

Narrow monetary aggregates have continued to grow briskly, reflecting the desire of both households and firms to keep money in liquid assets until it is clear that the recovery is taking hold. In the three months to November, the narrow aggregate M1+ grew at an annual rate of 15.5 per cent, whereas the broader aggregate M2++ grew at 6.6 per cent. The growth in narrow-money balances is expected to decline over time, as the economy improves.

Chart 14: Survey results suggest that lending conditions for Canadian non-financial firms have started to improve

Balance of opinion



a. Weighted percentage of surveyed financial institutions reporting tightened credit conditions minus the weighted percentage reporting eased credit conditions.

b. Percentage of firms reporting tightened minus percentage reporting eased credit conditions.

Source: Bank of Canada

Chart 15: The Canadian dollar has averaged close to 96 cents U.S. since the October *Report*

Daily data

Note: A rise in the index indicates an appreciation of the Canadian dollar.

Source: Bank of Canada

Exchange Rate

The Canadian dollar has traded in a range of about 92 to 98 cents U.S. since the October *Report*. Its average over this period was close to 96 cents U.S. **(Chart 15)**—the value assumed in the projection presented in the October *Monetary Policy Report*.

Policy Response

Canadian monetary and fiscal policies continue to provide needed stimulus to the economy. On 8 December 2009 and 19 January 2010, the Bank of Canada maintained its target for the overnight interest rate at 1/4 per cent—the effective lower bound for this target rate—and reaffirmed its commitment, conditional on the inflation outlook, to hold the policy rate at that level until the end of the second quarter of 2010.

Outlook for the Canadian Economy

The Bank's base-case projection incorporates the following key assumptions: a Canada/U.S. exchange rate averaging 96 cents U.S.; energy prices in line with recent futures prices; prices for non-energy commodities increasing progressively as the global economy recovers; and global credit conditions continuing to gradually improve.

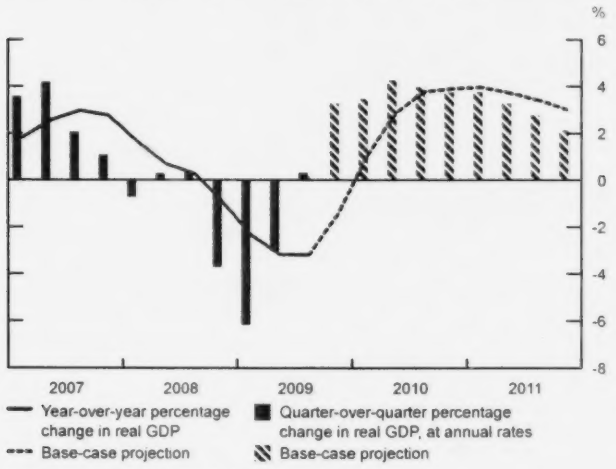
Aggregate Demand and Supply

The economy is projected to grow by 2.9 per cent in 2010 and 3.5 per cent in 2011, after having contracted by 2.5 per cent in 2009.

The outlook for the Canadian economy is very similar to that presented in the October *Report*, with the economy projected to return to full capacity in the third quarter of 2011. Following weaker-than-expected real GDP growth in the third quarter of 2009, the Bank projects that, beginning around mid-year and continuing into early 2011, growth will be slightly stronger than expected in October **(Chart 16)**. This upward revision reflects a stronger global economy and the Bank's view that the import surge in the third quarter was partly the result of temporary factors. On an average annual basis, the economy is now projected to grow by 2.9 per cent in 2010 and 3.5 per cent in 2011, after having contracted by an estimated 2.5 per cent in 2009 **(Table 3)**.

Consumer spending is expected to grow at a solid pace throughout the projection horizon, supported by improved consumer confidence, higher wealth, monetary stimulus, and the recovery in the growth of labour income. The personal savings rate is expected to begin to moderate as households unwind some of the precautionary savings they built up during the recession.

Chart 16: Real GDP growth is expected to accelerate in 2010



Sources: Statistics Canada and Bank of Canada calculations

Table 3: Contributions to average annual real GDP growth

Percentage points[a]

	2008	2009	2010	2011
Consumption	1.6 *(1.6)*	0.1 *(0.0)*	1.7 *(1.7)*	1.8 *(1.9)*
Housing	-0.2 *(-0.2)*	-0.5 *(-0.5)*	0.3 *(0.3)*	0.0 *(0.4)*
Government	1.1 *(1.1)*	1.0 *(1.0)*	1.3 *(1.3)*	-0.3 *(-0.3)*
Business fixed investment	0.0 *(0.0)*	-1.9 *(-1.9)*	0.1 *(0.1)*	0.8 *(0.9)*
Subtotal: Final domestic demand	2.5 *(2.5)*	-1.3 *(-1.4)*	3.4 *(3.4)*	2.3 *(2.6)*
Exports	-1.6 *(-1.6)*	-4.4 *(-4.4)*	1.9 *(1.9)*	2.1 *(1.9)*
Imports	-0.2 *(-0.2)*	4.4 *(4.6)*	-3.1 *(-2.9)*	-1.8 *(-2.0)*
Subtotal: Net exports	-1.8 *(-1.8)*	0.0 *(0.2)*	-1.2 *(-1.0)*	0.3 *(-0.1)*
Inventories	-0.3 *(-0.3)*	-1.2 *(-1.2)*	0.7 *(0.6)*	0.9 *(0.8)*
GDP	**0.4** *(0.4)*	**-2.5** *(-2.4)*	**2.9** *(3.0)*	**3.5** *(3.3)*
Memo items:				
Potential output	1.7 *(1.7)*	1.2 *(1.2)*	1.5 *(1.5)*	1.9 *(1.9)*
Real gross domestic income (GDI)	2.0 *(2.0)*	-5.9 *(-5.6)*	4.2 *(4.4)*	4.6 *(4.0)*

a. Figures in parentheses are from the base-case projection in the October *Monetary Policy Report*.

Following a period of vigorous growth, housing investment is projected to slow through 2010 as pent-up demand subsides and affordability declines.[4]

Business fixed investment is expected to recover in 2010 with the improvement in financial conditions and economic activity, as well as higher commodity prices. This projected increase in investment spending is consistent with the results of the Bank's recent *Business Outlook Survey*.

Export volumes are expected to continue to recover over the projection period in response to growing external demand and higher commodity prices. Export growth is projected to be somewhat stronger than was expected last October, owing to a more favourable outlook for the U.S. economy, particularly in the sectors that figure most importantly for Canadian exporters. The persistent strength in the Canadian dollar and the absolute low level of U.S. demand will, however, continue to dampen exports. Import volumes are also projected to grow at a solid pace, in line with the recovery in domestic demand, the rebound in exports, and the past appreciation of the Canadian dollar.

Economic growth is expected to become more solidly entrenched over the projection period as self-sustaining growth in private demand takes hold. The contribution of government spending to growth in domestic demand is expected to have peaked at about 2 percentage points in the last quarter of 2009, and then to gradually decline through 2010 before turning negative in 2011.

Economic growth is expected to become more solidly entrenched over the projection period as self-sustaining growth in private demand takes hold.

As the recovery in the Canadian economy continues, excess supply will gradually be absorbed. The economy is expected to reach its production capacity in the third quarter of 2011, as projected in the October *Report*.

The Projection for Inflation

Measured CPI inflation in Canada is expected to be slightly higher this year than projected in the October *Report*, reflecting the positive surprise to core inflation in the fourth quarter of last year **(Table 4)**.

4 For more on the housing sector, see "Canada's Housing Sector in Recession and Recovery: Beyond Bricks and Mortar." Remarks prepared by Deputy Governor Timothy Lane for delivery to the Edmonton CFA Society, Edmonton, 11 January 2010 <http://www.bankofcanada.ca/en/speeches/2010/sp110110.html>.

Table 4: Summary of the base-case projection for Canada[a]

	2008	2009				2010				2011			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP (quarter-over-quarter percentage change)	-3.7 *(-3.7)*	6.2 *(-6.1)*	-3.1 *(-3.4)*	0.4 *(2.0)*	3.3 *(3.3)*	3.5 *(3.8)*	4.3 *(3.8)*	4.0 *(3.7)*	3.8 *(3.5)*	3.8 *(3.3)*	3.3 *(3.3)*	2.8 *(2.8)*	2.2 *(2.5)*
Real GDP (year-over-year percentage change)	-1.0 *(-1.0)*	-2.3 *(-2.3)*	-3.2 *(-3.2)*	-3.2 *(-2.8)*	-1.5 *(-1.1)*	1.0 *(1.4)*	2.9 *(3.2)*	3.8 *(3.6)*	3.9 *(3.6)*	4.0 *(3.5)*	3.7 *(3.4)*	3.4 *(3.2)*	3.0 *(3.0)*
Core inflation (year-over-year percentage change)	2.2 *(2.2)*	1.9 *(1.9)*	1.9 *(1.9)*	1.7 *(1.7)*	1.6 *(1.4)*	1.6 *(1.4)*	1.7 *(1.5)*	1.7 *(1.5)*	1.8 *(1.7)*	1.8 *(1.8)*	1.9 *(1.9)*	2.0 *(2.0)*	2.0 *(2.0)*
Total CPI (year-over-year percentage change)	2.0 *(2.0)*	1.2 *(1.2)*	0.1 *(0.1)*	-0.9 *(-0.9)*	0.9 *(1.0)*	1.6 *(1.4)*	1.8 *(1.4)*	1.8 *(1.3)*	1.9 *(1.6)*	1.9 *(1.8)*	1.9 *(1.9)*	2.0 *(2.0)*	2.0 *(2.0)*
WTI[b] (level)	58 *(58)*	43 *(43)*	60 *(60)*	68 *(68)*	76 *(73)*	81 *(75)*	83 *(76)*	84 *(77)*	86 *(78)*	87 *(79)*	88 *(80)*	88 *(80)*	89 *(81)*

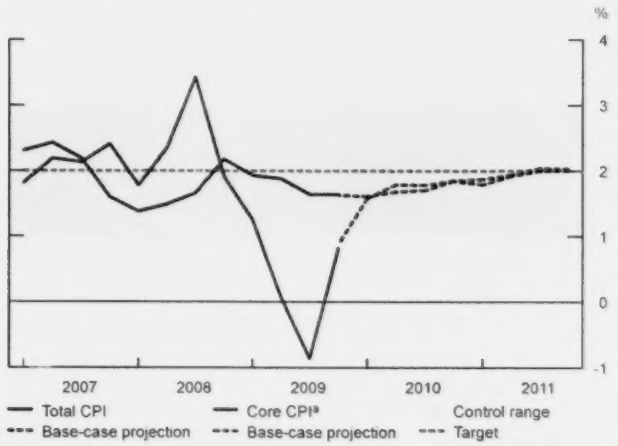
a. Figures in parentheses are from the base-case projection in the October *Monetary Policy Report*.
b. Assumptions for the price of West Texas Intermediate crude oil (US$ per barrel), based on an average of futures contracts over the two weeks ending 15 January 2010.

On the costs side, the Bank expects that wage growth over the projection period will remain at recent more moderate levels, compared with the first half of 2009.

Both core and total CPI inflation are projected to return to 2 per cent in the third quarter of 2011.

In the near term, core inflation is projected to remain fairly steady as the effect of the recent slowing in wage growth is largely offset by that of the gradual absorption of excess supply. As the impact of the first factor dissipates, and with inflation expectations well anchored, the core rate is projected to increase gradually, returning to 2 per cent in the third quarter of 2011 **(Chart 17)**.

Chart 17: Total CPI and core inflation in Canada are projected to return to 2 per cent in the third quarter of 2011
Year-over-year percentage change, quarterly data



a. CPI excluding eight of the most volatile components and the effect of changes in indirect taxes on the remaining components
Sources: Statistics Canada and Bank of Canada calculations

With the base-year effects for gasoline prices dropping out of the data last December, total CPI inflation is projected to follow a path very similar to that of the core rate throughout the projection horizon.[5] Total CPI inflation is also expected to return to the 2 per cent target in the third quarter of 2011.

The uncertainty surrounding the Bank's inflation projection is illustrated using fan charts. **Chart 18** and **Chart 19** depict the 50 per cent and 90 per cent confidence bands for year-over-year core and total CPI inflation from the first quarter of 2010 to the end of 2011.[6] In particular, they show the slight downward tilt to the confidence bands that results from monetary policy operating at the effective lower bound.

Chart 18: Projection for core CPI inflation
Year-over-year percentage change

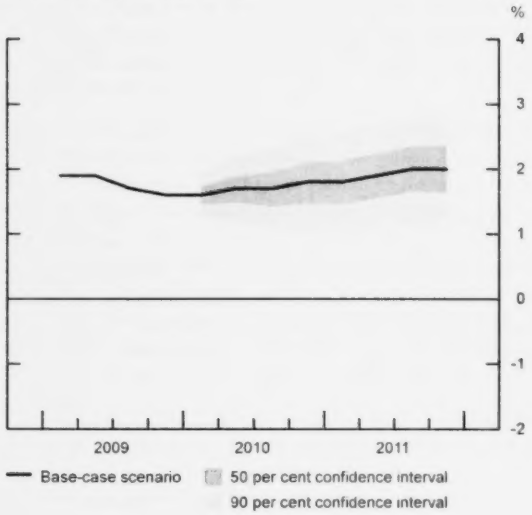
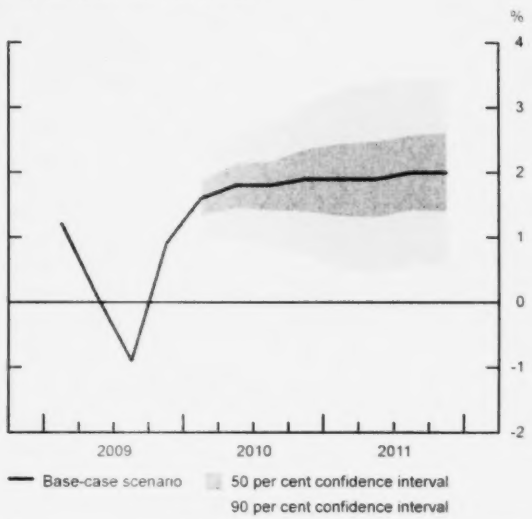


Chart 19: Projection for total CPI inflation
Year-over-year percentage change



5 This projection does not incorporate the impact of the harmonized sales tax that will be introduced in Ontario and British Columbia in July 2010. The Bank will provide an estimate of the impact in the April 2010 *Report*. As has been the case with other changes in indirect taxes, for the purpose of monetary policy, the Bank will see through the first-round effects of the tax on prices.

6 Technical details on the construction of the fan charts are available at <http://www.bankofcanada.ca/en/mpr/pdf/backgrounder_fancharts.pdf>.

Risks to the Outlook

The main risks to the outlook for inflation are those identified in the October *Monetary Policy Report*. Risks remain elevated, although they have continued to diminish gradually with the consolidation of the recovery in the global and Canadian economies.

The main upside risks to inflation are associated with the possibility of a stronger-than-anticipated global recovery. The Bank expects the recovery to be more protracted than in previous recessions, owing to the persistent effects of the financial crisis on credit markets and on household savings behaviour in many advanced economies. It is thus possible that the recovery in global demand could be more vigorous than projected, resulting in stronger external demand for Canadian exports. This could occur, for instance, in the event of unexpectedly rapid improvements in financial conditions and consumer confidence. A related risk is that Canadian domestic demand could be more robust than projected.

On the downside, there is the risk that persistent strength of the Canadian dollar could act as a significant further drag on growth and put additional downward pressure on inflation. Another important downside risk is that the global recovery could be even more protracted than projected. Growth is heavily dependent on the exceptional monetary and fiscal policy stimulus provided worldwide, as well as the extraordinary measures taken to support financial systems in many advanced countries. Self-sustaining growth in private demand, which will be required for a solid recovery, may take longer than expected to materialize.

While the Bank judges that these underlying macroeconomic risks are roughly balanced, the overall risks to the inflation projection are tilted slightly to the downside as a result of monetary policy operating at the effective lower bound. The reason for this tilt is that the Bank could respond with conventional monetary tightening in the event that upside risks materialized. In contrast, if downside risks materialized, the Bank would have to implement unconventional policies, for which greater prudence would be warranted.

Over the medium term, global macroeconomic imbalances continue to pose significant risks to the outlook. These imbalances have been attenuated during the recession, as U.S. households have curtailed their spending, while domestic demand in Asian emerging-market economies has been boosted by aggressive policy measures. Sustained improvement over the medium term will require fiscal consolidation in the United States and several other advanced countries, together with policy-induced domestic demand growth and real exchange rate adjustment for surplus countries. In the absence of these conditions, large imbalances may re-emerge, with the attendant risk of disorderly adjustment.

Bank of Canada Regional Offices

Atlantic Provinces
1583 Hollis Street, 5th Floor
Halifax, Nova Scotia B3J 1V4

David Amirault
Senior Regional Representative (Economics)

Monique LeBlanc
Senior Regional Representative (Currency)

Quebec
1501 McGill College Avenue, Suite 2030
Montréal, Quebec H3A 3M8

Phuong Anh Ho Huu
Senior Regional Representative (Currency)

Miville Tremblay
Senior Representative, Director (Financial Markets)

Ontario
150 King Street West, 20th Floor, Suite 2000
Toronto, Ontario M5H 1J9

Brigid Brady
Assistant Chief, Regional Analysis Division, Canadian Economic Analysis Department

Jane Voll
Senior Regional Representative (Economics)

Manuel Parreira
Senior Regional Representative (Currency)

Mark Caplan
Senior Representative, Director (Financial Markets)

Eric Tuer
Assistant Director (Financial Markets)

Prairie Provinces, Nunavut, and Northwest Territories
404 – 6th Avenue SW, Suite 200
Calgary, Alberta T2P 0R9

Alexander Fritsche
Senior Regional Representative (Economics)

Ted Mieszkalski
Senior Regional Representative (Currency)

British Columbia and Yukon
200 Granville Street, Suite 2710
Vancouver, British Columbia V6C 1S4

Farid Novin
Senior Regional Representative (Economics)

Lori Rennison
Senior Regional Representative (Economics)

Trevor Frers
Senior Regional Representative (Currency)

New York Office
Canadian Consulate General
1251 Avenue of the Americas
New York, NY 10020-1175 U.S.A.

Scott Kinnear
Consul and Senior Representative for the Bank of Canada